

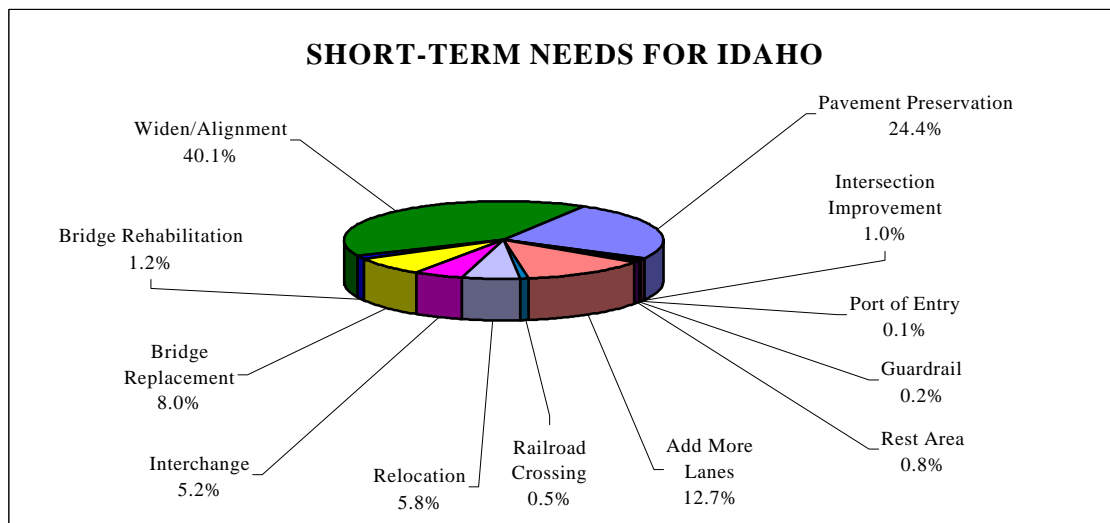
SHORT-TERM NEEDS

OVERVIEW OF SHORT-TERM NEEDS

Total short-term needs for the State of Idaho are \$2.0 billion. Short-term needs are defined as needs through fiscal year 2002. All projects in the highway development program have been included in the short-term needs. The remaining short-term needs originated from the following sources: requested but not funded projects, Highway Performance Monitoring System – Analytical Package model output, routine maintenance needs, bridges with a sufficiency ratings less than 50, and bridges identified by Idaho Transportation Department's Bridge section as needing rehabilitation. The Highway Performance Monitoring System – Analytical Package is a computer model that the Federal Highway Administration developed, and uses in their biennial reports to congress. The short-term needs, with the exception of routine maintenance needs, have been mapped for the state by district. These maps can be found on pages 30 through 35.

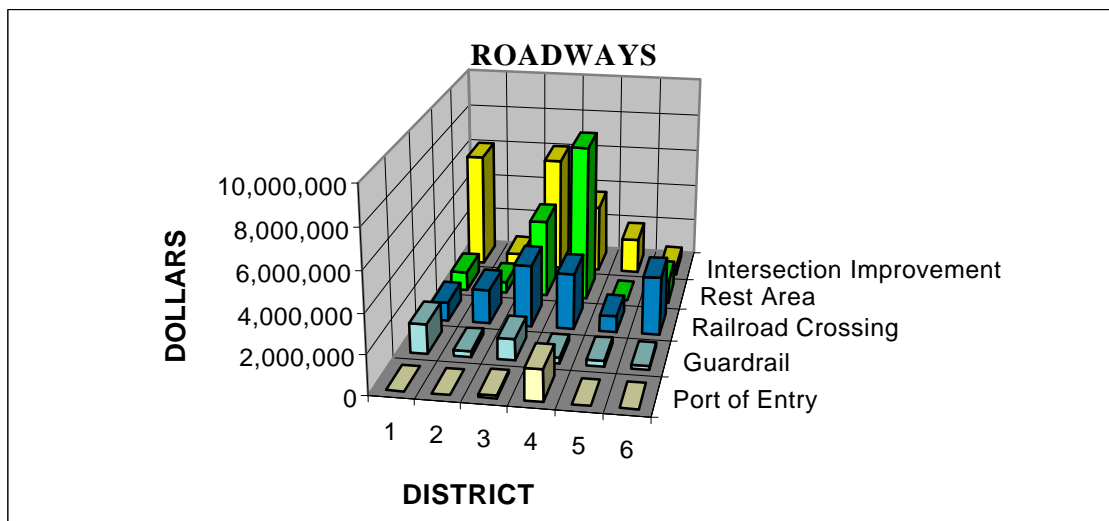
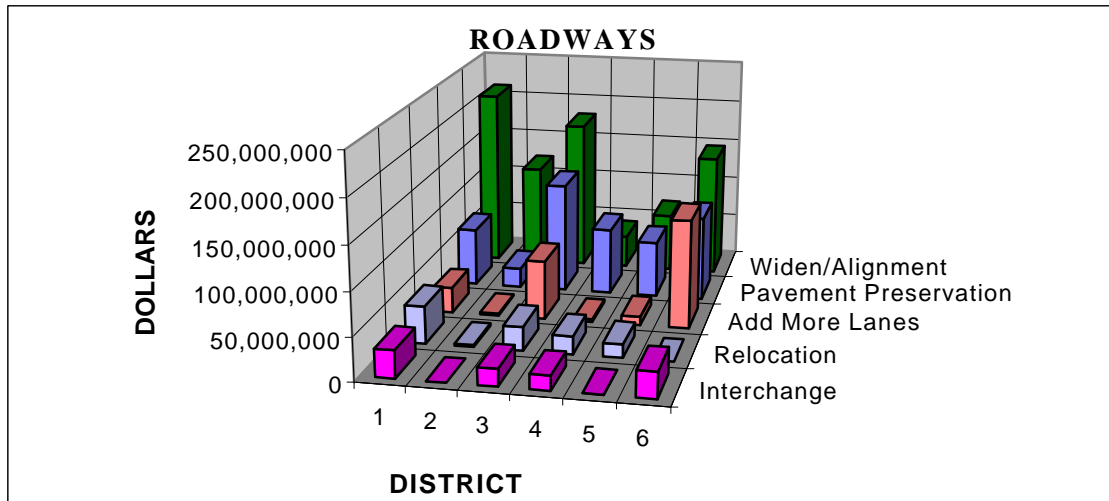
The pie chart below shows the percentage of short-term needs for the state for each type of improvement that was mapped. Pie charts showing these percentages for each district are on pages 40 and 41.

Roadways



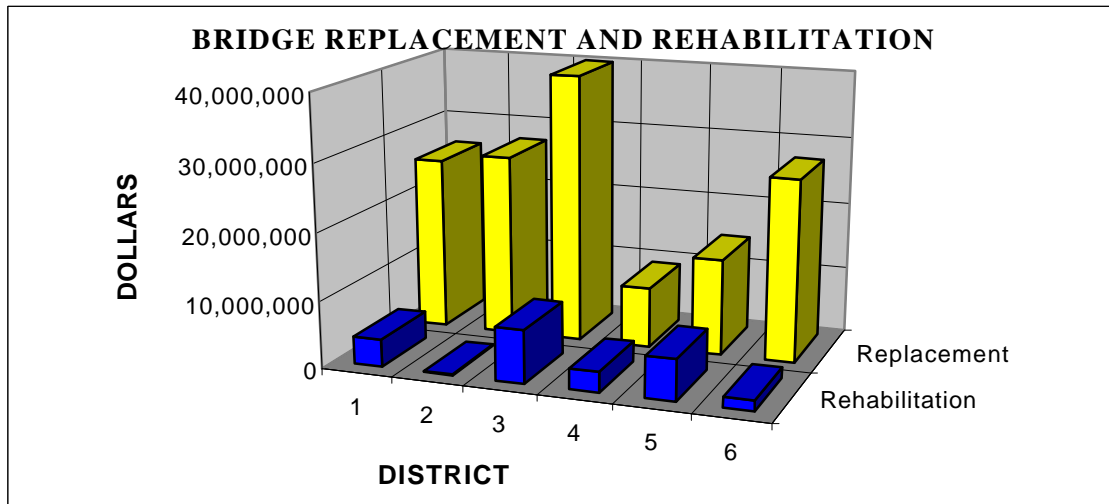
Total roadway needs for Idaho are \$1.7 billion. The following items are included in roadway needs: new roadway facilities, widening, re-alignment, additional lanes on existing facilities, pavement preservation, intersection improvements, port of entry facilities, guardrail, rest area facilities, new interchange construction or reconstruction, and railroad crossing upgrades.

The next two graphs show the needed dollar amounts corresponding to the categories on the short-term need maps. These two graphs have been broken down to show the needs by district.



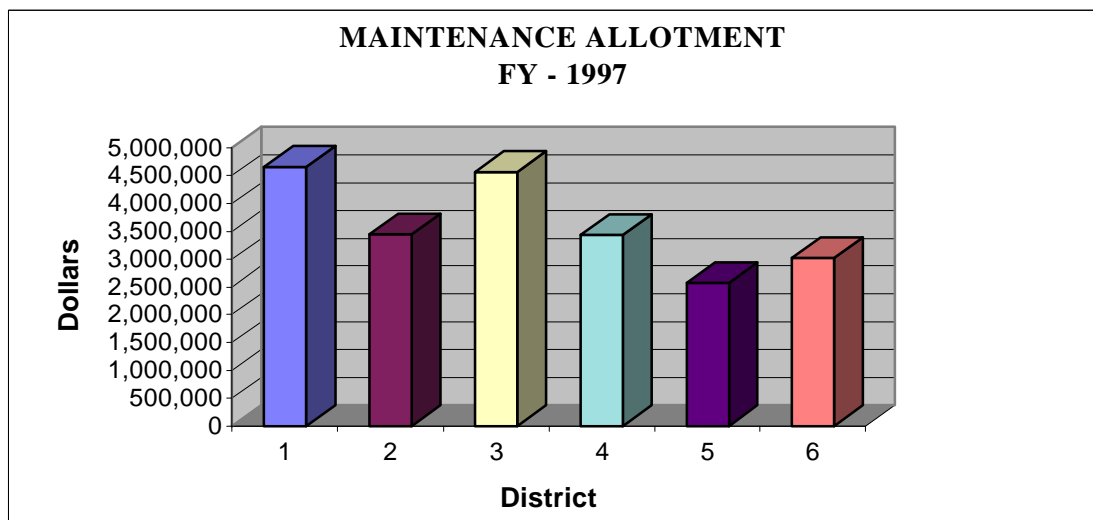
Bridges

Total bridge replacement and rehabilitation needs for state highways are \$171 million. The graph below shows the cost, by district, to replace and rehabilitate all bridges requiring work. The replacement cost is the dollar amount required to replace all bridges that have sufficiency ratings less than 50. The rehabilitation cost is the dollar amount required to rehabilitate bridges that need minor work, such as deck replacements and approach slabs. For a brief discussion on bridge sufficiency ratings, see page 29, Critical Bridge Locations.



Maintenance

The maintenance allotment for state fiscal year 1997 is \$ 21.7 million. This allotment is the money that goes to maintaining state highways for summer and winter maintenance. Summer maintenance includes plant mix, highway materials, paint, rental equipment, and highway labor. Winter maintenance includes the salt and sand which is required on slick roads. Overhead costs are not included in these dollar figures. Therefore, the maintenance allotments graphed below do not include the following items: utilities, communications, other services, office supplies and travel.



OVERVIEW OF MAPS

Pavement Condition

Roadway surfaces are classified as Good, Fair, Poor, and Very Poor based on the lower of the Cracking Index (CI) and the Roughness Index (RI). The Cracking Index is a rating of a roadway surface's visual distress. The Roughness Index is a rating of surface smoothness. The criteria for pavement condition is as follows:

Pavement Condition	Interstate and Arterial	Collectors
Good	CI, RI > 3.0	CI, RI > 3.0
Fair	$3.0 \geq$ CI, RI > 2.5	$3.0 \geq$ CI, RI > 2.0
Poor	$2.5 \geq$ CI, RI > 2.0	$2.0 \geq$ CI, RI > 1.5
Very Poor	$2.0 \geq$ CI, RI > 0.0	$1.5 \geq$ CI, RI > 0.0

The map of current pavement conditions for Idaho's state highways is located on page 36. Additional information on pavement condition is contained in the Idaho Transportation Department's *Annual Pavement Performance Report*.

Roadway Congestion

Volume to Capacity Deficiencies

96 centerline miles of Idaho's roadways are currently "at or near" congested traffic levels. Refer to the Standards chapter for discussion on congestion, levels of service, and volume to capacity ratios. The following table contains criteria for "at or near" congested levels of traffic:

VOLUME / CAPACITY RATIO				
	Near Capacity		At Capacity	
	Urban	Rural	Urban	Rural
Interstate	0.66	0.75	0.83	0.92
Two Lane Highway	0.60	0.39	1.00	0.62
Three Or More Lane	0.79	0.75	1.00	0.89

This criteria means that roadways which are providing approximately Level of Service D or less are considered to be "at or near" congestion. Roadways in Idaho that are "at or near" congested traffic levels are shown on the map located on page 37.

Passing Lane Deficiencies

Additional congestion is created when vehicles must follow behind other slow-moving vehicles for extended periods of time because of limited passing opportunities combined with high commercial vehicle and high total traffic volumes. This congestion can be

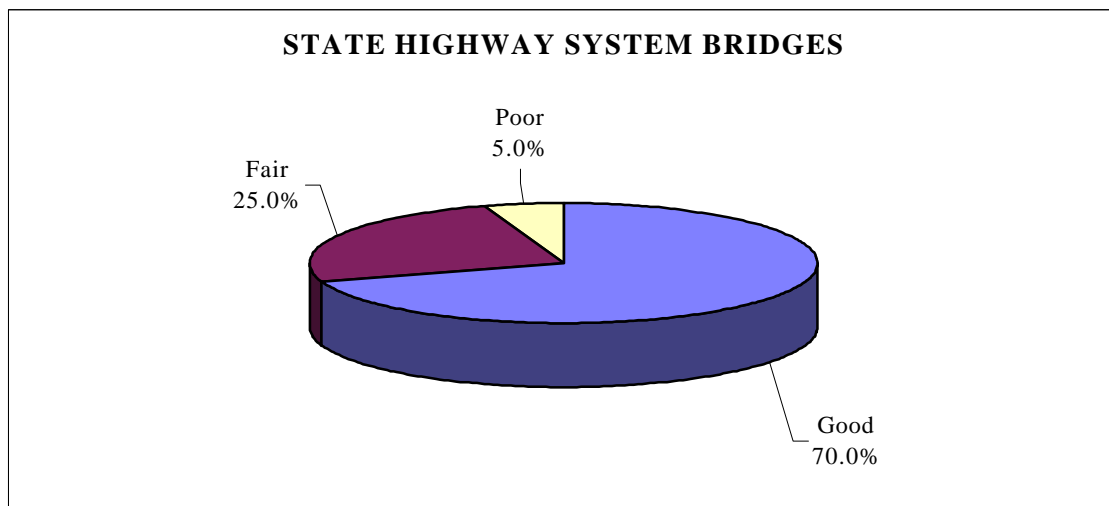
alleviated through the construction of passing lanes. Congested roadways due to limited passing opportunities are shown on the map on page 37.

Critical Bridge Locations

Bridges are assigned a sufficiency rating, which ranges from 0 to 100. The sufficiency rating is a measure of the bridges':

- Structural adequacy
- Compliance with current design standards
- Importance for public use
- Eligibility for federal bridge replacement funds

A sufficiency rating below 50 implies that the bridge is in poor condition and needs to be replaced. Sufficiency ratings between 50 and 80 suggests that the bridge is in fair condition, and that rehabilitation, if cost-effective, will bring the bridge up to current standards. Bridges with sufficiency ratings above 80 are considered to be in good or adequate condition in all areas and are not eligible for federal funding. Idaho has 1706 bridges on the state highway system. Locations of bridges with sufficiency ratings less than or equal to 80 are shown on page 38. Below is a graph showing the percentage of good, fair, and poor bridges on the state highway system.



High Accident Locations

The reduction of accidents at high-accident locations is an essential activity of the Department's highway safety program. The Department prepares an annual list of high accident locations for roadways on the state system. The locations are ranked by three-year accident frequency, economic loss, and ratio above Idaho's base rate. The locations are then analyzed for corrective action. The map on page 39 shows the High Accident Locations for urban and rural areas. See the Idaho Transportation Department's *Traffic Manual* for more information.